



ARIZONA DEPARTMENT OF HEALTH SERVICES

 RECEIVED BY E-PA
 Office of the Director
 REGION IX
 COMM. CENTER

W. F. RABBITT, Governor

Suzanne DANDROY, M.D., M.P.H., Director

January 4, 1979

JAN 8 12 58 PM '79

#14

Mr. Paul De Falco, Jr.
 Regional Administrator
 U.S. Environmental Protection Agency
 Region IX
 215 Fremont Street
 San Francisco, California 94105

Dear Mr. De Falco:

Five copies each of the documents described below are hereby submitted as a revision to the Arizona State Implementation Plan pursuant to 40 Code of Federal Regulations, Part 51.6:

1. Amendments to Chapter 3 of Title 9, Arizona Rules and Regulations for Air Pollution Control (except Article 10, Motor vehicles) as adopted by the Director of Health Services and certified by the Attorney General of the State of Arizona.
2. Evaluation form covering each regulatory change and addition.
3. Notice of public hearings, requests for publication in various newspapers, and certification of such publication.
4. Summary of the minutes of public hearings.
5. Record of Transmittal of hearing notices and rule revisions to the Regional Administrator, other concerned states, and other agencies within the State of Arizona.
6. The previously existing Chapter 3, Rules and Regulations for Air Pollution Control.

Sincerely,

Suzanne Dandroy, M.D., M.P.H.
 Director

SD:RBS:gc

Enclosures

1-4-77

DIRECTOR OF THE DEPARTMENT OF HEALTH SERVICES

Order of Rule Adoption

Pursuant to A.R.S. § 36-1707, the Director of the Department of Health Services hereby adopts the following rule:

CHAPTER 3

AMENDMENTS TO

RULES AND REGULATIONS

FOR

AIR POLLUTION CONTROL

- 1 Part 1, Articles #1, #2, #3, #4, #5, #6, #7, #8, #9, #11, and #12, and
2 Appendix 3 and Appendix 6, of Chapter #3, Title #9, are repealed and new
3 Articles #1, #2, #3, #4, #5, #6, #7, #8, #9, and #11, and Appendix 9,
4 Appendix 10, and Appendix 11 are adopted as follows:

5

6

ARTICLE 1. DEFINITIONS

7

8 R9-3-01. Reserved

9 Thru

10

11 R9-3-100. Reserved

12

13

14 R9-3-101. Definitions

15 A. In these rules and regulations the following definitions in this

721

1 section shall govern, unless the context otherwise requires, and unless
2 in conflict with a definition given in Article 8, New Source Performance
3 Standards, or in Article 9, Hazardous Air Pollutant Standards. In such
4 case, the definitions given in Articles 8 or 9 shall apply only to sources
5 covered by those Articles, and the definitions given in this section shall
6 govern elsewhere.

7 1. "Acid mist" means sulfuric acid mist as measured by Method 8 in
8 the Arizona Stack Testing Manual.

9 2. "Act" means the Clean Air Act, 42 U.S.C.A. § 7401 et seq.

10 3. "Administrator" means the Administrator of the United States
11 Environmental Protection Agency.

12 4. "Affected facility" means, with reference to a stationary source,
13 any apparatus to which a standard is applicable.

14 5. "Air pollution control equipment" means equipment used to eli-
15 minate, reduce or control the discharge of air contaminants into the
16 ambient air.

17 6. "Air quality control region" means an area so designated by the
18 Administrator of the United States Environmental Protection Agency pur-
19 suant to Section 107 of the Federal Clean Air Act as amended, and includes:

20 a. Phoenix-Tucson Intrastate Air Quality Control Region which
21 encompasses the counties of Gila, Maricopa, Pima, Pinal and Santa Cruz in
22 Arizona.

23 b. Clark-Mohave Interstate Air Quality Control Region which encom-
24 passes Clark County in Nevada and the counties of Mohave and Yuma in
25 Arizona.

26 c. Arizona-New Mexico Southern Border Interstate Air Quality Control

1 Region which encompasses the counties of Cochise, Graham and Greenlee in
2 Arizona and the counties of Grant, Hidalgo and Luna in New Mexico.

3 d. Four Corners Interstate Air Quality Control Region which encom-
4 passes the counties of Apache, Coconino, Navajo and Yavapai in Arizona;
5 the counties Archuleta, Dolores, La Plata, Montezuma, and San Juan in
6 Colorado; all of San Juan County and portions of the counties of Rio
7 Arriba, Sandoval, McKinley and Valencia in New Mexico; the counties of
8 Emery, Garfield, Grand, Iron, Kane, San Juan, Washington and Wayne in
9 Utah.

10 7. "Allowable emissions" means the most stringent of the following:

11 a. The applicable new source performance standards or existing
12 source performance standards, or

13 b. The emission rate agreed to by the source as a permit condition.
14 Allowable emissions shall be calculated at the source's maximum rated
15 capacity, unless the source is subject to enforceable permit conditions
16 which limit rate of operation, hours of operation, or the type or amount
17 of materials combusted or processed.

18 8. "Alternative method" means any method of sampling and analyzing
19 for an air pollutant which is not a reference or equivalent method but
20 which has been demonstrated to the Director's satisfaction to, in specific
21 cases, produce results adequate for the Director's determination of com-
22 pliance.

23 9. "Ambient air" means that portion of the atmosphere, external to
24 buildings, to which the general public has access.

25 10. "Architectural coating" means a coating used commercially or
26 industrially for residential, commercial or industrial buildings and their

1 appurtenances, structural steel and other fabrications such as, but not
2 limited to, storage, tanks, bridges, beams and girders.

3 11. "Arizona Testing Manual" means the Arizona Testing Manual for
4 Air Pollutant Emissions.

5 12. "ASME" means American Society of Mechanical Engineers. All
6 ASME test methods referenced as guides in these rules and regulations
7 shall be those methods adopted on or before the effective date of this
8 section.

9 13. "Asphalt concrete plant" means any facility, as described in
10 R9-3-508, used to manufacture asphalt concrete by heating and drying
11 aggregate and mixing with asphalt cements.

12 14. "ASTM" means American Society for Testing and Materials. All
13 ASTM test methods referenced as guides in these rules and regulations
14 shall be those methods adopted on or before the effective date of this
15 section.

16 15. "Attainment area" means an area so designated by the Adminis-
17 trator acting pursuant to Section 107 of the Act as having ambient air
18 pollutant concentration less than national primary or secondary air
19 quality standards for a particular pollutant or pollutants.

20 16. "Best available control technology" (BACT) means an emission
21 limitation based on the maximum reduction of a pollutant subject to these
22 Rules and Regulations which the Director, on a case-by-case basis, taking
23 into account energy, environmental and economic impact and other costs,
24 determines is achievable for a source or facility. If, due to techno-
25 logical or economic limitations on the application of measurement method-
26 ology, no emission limit is feasible, the application of BACT can require

1 compliance with design, equipment, work practice or operational standards
2 or any combination thereof. The degree of emission limitation necessary
3 to constitute BACT shall not be affected in any manner either by so much
4 of the stack height of any source as exceeds allowable design criteria
5 or any other dispersion technique. The preceding sentence shall not
6 apply with respect to stack heights in existence before the date of
7 enactment of the Clean Air Act Amendments of 1970 or dispersion tech-
8 niques implemented before such date. For purposes of BACT allowable
9 design criteria means the stack height necessary to insure that emissions
10 from the stack do not result in excessive concentrations of any air
11 pollutant in the immediate vicinity of the source as a result of atmos-
12 pheric downwash, eddies and wakes which may be created by the source
13 itself, nearby structures or nearby terrain obstacles (as determined
14 by the Director). Such height shall not exceed two and a half times
15 the height of such source unless the owner of the source demonstrates,
16 after notice and opportunity for public hearing, to the satisfaction of
17 the Director, that a greater height is necessary for the reason(s) cited
18 in the preceding sentence. In no event shall application of BACT result
19 in emissions of any pollutant, which will exceed the emissions allowed
20 by any applicable new source performance standard.

21 17. "Black Liquor" means waste liquor from the brown stock washer
22 and spent cooking liquor which have been concentrated in the multiple
23 effect evaporator system.

24 18. "Btu" means British thermal unit which is the quantity of
25 heat required to raise the temperature of one pound of water one degree
26 Fahrenheit.

1 19. "Bureau" means the Bureau of Air Quality Control within the
2 Arizona State Department of Health Services.

3 20. "Calcine" means the solid materials produced by a roaster.

4 21. "Calorie" means the quantity of heat required to raise the
5 temperature of one gram of water one degree Celsius.

6 22. "Capacity factor" means the ratio of the average load on a
7 machine or equipment for the period of time considered to the capacity
8 rating of the machine or equipment.

9 23. "Capture system" means the equipment (including ducts, hoods,
10 fans, dampers, etc.) used to capture or transport particulate matter or
11 gases generated by a process source to the air pollution control device.

12 24. "Charge" means the addition of metal bearing materials, scrap,
13 or fluxes to a furnace, converter or refining vessel.

14 25. "Coal" means all solid fossil fuels classified as anthracite,
15 bituminous, subbituminous, or lignite by ASTM Designation D-388-66.

16 26. "Combustion" means the burning of matter.

17 27. "Commenced" means that an owner or operator has either:
18 a. Begun, or caused to begin, a continuous program of physical
19 on-site construction of the source, or,
20 b. Entered into binding agreements or contractual obligations which
21 cannot be cancelled or modified without substantial loss to the owner or
22 operator, to undertake a program of construction of the source to be
23 completed within a reasonable time.

24 28. "Condensate stripper system" means a column, and associated
25 condensers used to strip, with air or steam, TRS compounds from condensate
26 streams from various processes within a kraft pulp mill.

1 29. "Construction" means replacement, fabrication, erection or
2 installation of an affected facility.

3 30. "Continuous monitoring system" means the total equipment,
4 required under the emission monitoring subsections in applicable sections,
5 used to sample and condition (if applicable), to analyze, and to provide
6 a permanent record of emission or process parameters.

7 31. "Control device" means the air pollution control equipment used
8 to remove particulate matter or gases generated by a process source from
9 the effluent gas stream.

10 32. "Copper concentrate" means enriched copper ore recovered from
11 the froth flotation process.

12 33. "Copper concentrate dryer" means any facility in which a copper
13 sulfide ore concentrate charge is heated in the presence of air to eliminate
14 a portion of the moisture from the charge, provided less than five (5)
15 percent of the sulfur contained in the charge is eliminated in the facility.

16 34. "Copper concentrate roaster" means any facility in which a
17 copper sulfide ore concentrate is heated in the presence of air to eli-
18 minate a significant portion (five percent or more) of the sulfur con-
19 tained in the charge.

20 35. "Copper converter" means any vessel to which copper matte is
21 charged and oxidized to copper.

22 36. "Copper matte" means a metallic sulfide made by melting the
23 roasted product of copper sulfide ores.

24 37. "Copper reverberatory smelting furnace" means any vessel in
25 which the smelting of copper sulfide ore concentrates or calcines is
26 performed and in which the heat necessary for smelting is provided pri-

1 marily by combustion of a fossil fuel.

2 38. "Copper smelting" means processing techniques for the smelting
3 of a copper sulfide ore concentrate or calcine charge leading to the
4 formation of separate layers of molten slag, molten copper, and/or copper
5 matte.

6 39. "Copper smelting furnace" means any vessel in which the smelting
7 of copper sulfide ore concentrates or calcines is performed and in which
8 the heat necessary for smelting is provided by an electric current, rapid
9 oxidation of a portion of the sulfur contained in the concentrate as it
10 passes through an oxidizing atmosphere, or the combustion of a fossil
11 fuel.

12 40. "Department" means the Department of Health Services.

13 41. "Director" means the Director of the Department of Health Services.

14 42. "Discharge" means the release, escape or emission of an effluent
15 into the atmosphere.

16 43. "Dust" means finely divided solid particulate matter occurring
17 naturally or created by mechanical processing, handling or storage of
18 materials in the solid state.

19 44. "Dust suppressant" means a chemical compound or mixture of
20 chemical compounds added with or without water to a dust source for pur-
21 poses of preventing air entrainment.

22 45. "Effluent" means any air contaminant which is emitted and subse-
23 quently escapes into the atmosphere.

24 46. "Emission" means the act of passing into the atmosphere an air
25 contaminant or a gas stream, visible or invisible.

26 47. "Emission point" means the location (place in horizontal plane

1 and vertical elevation) at which an emission enters the atmosphere.

2 48. "Emission standard" means a regulation (or portion thereof)
3 setting forth an allowable rate of emissions, level of opacity, or
4 prescribing equipment or fuel specifications that result in control of
5 air pollution emissions.

6 49. "Equivalent method" means any method of sampling and analyzing
7 for an air pollutant which has been demonstrated to the Director's
8 satisfaction to have a consistent and quantitatively known relationship
9 to the reference method, under specified conditions.

10 50. "Excess emissions" means emissions of an air pollutant in
11 excess of an emission standard.

12 51. "Existing source" means any source which commenced replacement,
13 erection, installation or making a major alteration of the type des-
14 cribed in R9-3-301 (installation permit) prior to the effective date of
15 these Rules and Regulations.

16 52. "Existing source performance standards" means emission limita-
17 tions or other performance requirements for stationary sources, the
18 replacement, erection, installation or major alteration of which is
19 commenced prior to the effective date of the regulations as prescribed
20 by Article 5 of this chapter (existing stationary point source perfor-
21 mance standards).

22 53. "Facility" means an identifiable piece of stationary process
23 equipment and all associated equipment. A stationary source is composed
24 of one or more pollutant-emitting facilities.

25 54. "Fossil fuel-fired steam generator" means a furnace or boiler
26 used in the process of burning fossil fuel for the primary purpose of

1 producing steam by heat transfer.

2 55. "Fuel" means any material which is burned for the purpose of
3 producing energy.

4 56. "Fugitive dust" means naturally occurring particulates uncon-
5 taminated by pollutants resulting from industrial activity. Fugitive
6 dust may include emissions from unpaved roads, paved roads, tilled farm
7 land, exposed surface areas, arid lands, sparsely vegetated lands, un-
8 improved lands, land reclamation, construction sites, mining activities
9 associated with overburden removal, blasting, haul road truck transport
10 and native soil which becomes airborne from any other source.

11 57. "Fugitive emissions" means emissions not vented to the
12 atmosphere through a stack or stacks.

13 58. "Fume" means solid particulate matter resulting from the conden-
14 sation and subsequent solidification of vapors of melted solid materials.

15 59. "Gasoline" means any petroleum distillate having a Reid vapor
16 pressure of four (4) pounds or more.

17 60. "Ground cover" means the area covered by the combined aerial
18 parts of plants and naturally occurring mulches expressed as a percentage
19 of the total area of measurement.

20 61. "Hazardous air pollutant" means an air pollutant to which no
21 Arizona ambient air quality standard is applicable and which in the
22 judgment of the Director causes, or contributes to, air pollution which
23 may reasonably be anticipated to result in an increase in mortality or
24 an increase in serious irreversible, or incapacitating reversible, illness.

25 62. "Hearing Board" means the State Air Pollution Control Hearing
26

1 Board.

2 63. "Heat input" means the quantity of heat in terms of Btu's
3 generated by fuels fed into the fuel burning equipment under conditions
4 of complete combustion.

5 64. "High terrain" means any area having an elevation of nine
6 hundred (900) feet or more above the base of the stack of a facility.

7 65. "Incinerator" means any equipment, machine, device, contrivance
8 or other article and all appurtenances thereof used for the combustion
9 of refuse, salvage materials or any other combustible material except
10 fossil fuels. Such combustion shall be for the purpose of reducing the
11 volume of material.

12 a. Multiple chamber incinerator: A multiple chamber incinerator
13 consists of three or more refractory-lined combustion chambers in series,
14 physically separated by refractory walls and interconnected by gas passage
15 ports or ducts.

16 b. Controlled atmosphere incinerator: A controlled atmosphere
17 incinerator consists of one or more refractory-lined chambers in which
18 complete combustion is promoted by recirculation of gases by mechanical
19 means.

20 c. Wood waste burner: A wood waste burner is an incinerator de-
21 signed and used exclusively for the burning of wood wastes consisting of
22 wood slabs, scraps, shavings, barks, sawdust or other wood material.
23 Generation of steam as a by-product shall not affect the classification
24 of the device as an incinerator.

25 d. Air curtain destructor: An air curtain destructor is an incin-
26 eration device designed and used to secure, by means of a fan generated

1 air curtain, controlled combustion of only wood waste and slash materials
2 in an earthen trench or refractory-lined pit or bin.

3 e. Afterburner: An afterburner is an incinerator installed in the
4 secondary combustion chamber or stack for the purpose of incinerating
5 smoke, fumes, gases, unburned carbon, and other combustible material not
6 consumed during primary combustion.

7 f. Fume incinerator: A fume incinerator is a device similar to an
8 afterburner installed for the purpose of incinerating fumes, gases and
9 other finely divided combustible particulate matter not previously
10 burned.

11 66. "Isokinetic sampling" means sampling in which the linear
12 velocity of the gas entering the sampling nozzle is equal to that of the
13 undisturbed gas stream at the sample point.

14 67. "Kraft pulp mill" means any stationary source which produces
15 pulp from wood by cooking (digesting) wood chips in a water solution
16 of sodium hydroxide and sodium sulfide (white liquor) at high temperature
17 and pressure. Regeneration of the cooking chemicals through a recovery
18 process is also considered part of the kraft pulp mill.

19 68. "Kraft pulp mill digester system" means each continuous di-
20 gester or each batch digester used for the cooking of wood in the white
21 liquor, and associated flash tank(s), blow tank(s), chip streamer(s),
22 and condenser(s).

23 69. "Lead" means elemental lead or alloys in which the predominant
24 component is lead.

25 70. "Lime hydrator" means a unit used to produce hydrated lime
26 product.

1 71. "Lime kiln" means a unit used to calcine lime rock or kraft
2 pulp mill lime mud which consists primarily of calcium carbonate, into
3 quicklime, which is calcium oxide.

4 72. "Lime manufacturing plant" includes any plant which produces a
5 lime product from limestone by calcination. Hydration of the lime pro-
6 duct is also considered to be part of the source.

7 73. "Lime product" means the product produced by the calcination
8 process including, but not limited to, calcitic lime, dolomitic lime,
9 and deadburned dolomite.

10 74. "Lowest achievable emission rate" (LAER) means an emission
11 limitation based on the maximum reduction of a pollutant subject to
12 these Rules and Regulations which the Director, on a case-by-case basis,
13 taking into account energy, environmental and economic impact and other
14 costs, determines is achievable for a source or facility. If, due to
15 technological or economic limitations on the application of measurement
16 methodology, no emission limit is feasible, the application of LAER can
17 require compliance with design, equipment, work practice or operational
18 standards or any combination thereof. The degree of emission limitation
19 necessary to constitute LAER shall not be affected in any manner either
20 by so much of the stack height of any source as exceeds allowable de-
21 sign criteria or any other dispersion technique. The preceding sentence
22 shall not apply with respect to stack heights in existence before the
23 date of enactment of the Clean Air Act Amendments of 1970 or dispersion
24 techniques implemented before such date. For purpose of LAER allowable
25 design criteria means the stack height necessary to insure that emissions
26 from the stack do not result in excessive concentration of any air

1 pollutant in the immediate vicinity of the source as a result of atmos-
2 pheric downwash, eddies and wakes which may be created by the source
3 itself, nearby structures or nearby terrain obstacles (as determined by
4 the Director). Such height shall not exceed two and a half times the
5 height of such source unless the owner of the source demonstrates, after
6 notice and opportunity for public hearing, to the satisfaction of the
7 Director, that a greater height is necessary for the reason(s) cited in
8 the preceding sentence. In no event shall application of LAER result
9 in emissions of any pollutant, which will exceed the emissions allowed
10 by the most stringent of the following:

- 11 a. New source performance standards, or
- 12 b. Existing source performance standards, or
- 13 c. The most stringent emission limitation which has been adequately
14 demonstrated in practice for such class or category of sources or faci-
15 lities.

16 75. "Major alteration" means any physical change in, or change in
17 the method of operation of, a source which increases the potential
18 emission rate of any air pollutant to which a standard under these Rules
19 and Regulations applies by one hundred (100) tons per year or more,
20 except that:

- 21 a. Routine maintenance, repair and replacement shall not be con-
22 sidered a physical change.
- 23 b. The following shall not be considered a change in the method of
24 operation:
 - 25 i. An increase in production rate, if such increase does not
26 exceed the operating design capacity of the affected facility;

- 1 ii. An increase in the hours of operation, subject to conditions
2 contained in the source's operating permit;
- 3 iii. Use of an alternative fuel or raw material by reason of an
4 order in effect under Section 2(a) and (b) of the Energy Supply and
5 Environmental Coordination Act of 1974 (15 U.S.C.A. § 792 or any super-
6 seding legislation), or by reason of a natural gas curtailment plan in
7 effect pursuant to the Federal Power Act (U.S.C.A. Title 16, Chapter 12);
- 8 iv. Use of an alternative fuel or raw material, if prior to
9 January 6, 1975, the source was capable of accommodating such fuel or
10 material;
- 11 v. Use of an alternative fuel by reason of an order or rule under
12 Section 125 of the Act;
- 13 vi. Change in ownership of the affected facility.
- 14 76. "Major source" means a source which has the potential to emit
15 more than 100 tons per year of any pollutant subject to this Chapter.
- 16 77. "Malfunction" means any sudden and unavoidable failure of air
17 pollution control equipment or process equipment or a process to operate
18 in a normal and usual manner. Failures that are caused by poor main-
19 tenance, careless operation or any other upset condition or equipment
20 breakdown which could have been prevented by the exercise of reasonable
21 care shall not be considered malfunctions.
- 22 78. "Molybdenum roaster" means any facility in which a molybdenum
23 sulfide ore concentrate charge is heated in the presence of air to
24 eliminate a significant portion (5 percent or more) of the sulfur contained
25 in the charge.
- 26 79. "Monitoring device" means the total equipment, required under

1 the monitoring of operations sections in applicable subparts, used to
2 measure and record (if applicable) process parameters.

3 80. "Motor vehicle" means any self-propelled vehicle designed for
4 transporting persons or property on public highways.

5 81. "Mulch" means vegetative residues or other suitable materials
6 that adequately stabilize the soil, provide moisture and climate condi-
7 tions suitable for germination and growth, and do not interfere with
8 the postmining use of the land.

9 82. "Multiple-effect evaporator system" means the multiple-effect
10 evaporators and associated condenser(s) and hotwell(s) used to concen-
11 trate the spent cooking liquid that is separated from the pulp (black
12 liquor).

13 83. "Neutral sulfite semichemical pulping operation" means any
14 operation in which pulp is produced from wood by cooking (digesting)
15 wood chips in a solution of sodium sulfite and sodium bicarbonate,
16 followed by mechanical defibrating (grinding).

17 84. "New source" means any major source of air pollution or
18 potential source of air pollution, the construction of which was
19 commenced after the effective date of these Rules and Regulations.

20 85. "New source performance standards" means the emission limita-
21 tions or other performance requirements for stationary sources, the
22 construction or major alteration of which is commenced after the
23 effective date of the regulations as prescribed by Article 8 of this
24 Chapter (New source performance article).

25 86. "Nitric acid plant" means any facility producing nitric acid
26 30 to 70 percent in strength by either the pressure or atmospheric

1 pressure process.

2 87. "Nitrogen oxides" means all oxides of nitrogen except nitrous
3 oxide, as measured by test methods set forth in the Arizona Testing
4 Manual.

5 88. "Nonattainment area" means an area so designated by the Admin-
6 istrator acting pursuant to Section 107 of the Act (42 U.S.C.A. § 7401)
7 as exceeding national primary or secondary ambient air standards for a
8 particular pollutant or pollutants.

9 89. "Non-point source" means a source of air contaminants which
10 lacks an identifiable plume or emission point.

11 90. "Opacity" means the degree of obscuration of transmitted light.

12 91. "Operation" means any physical or chemical action resulting in
13 the change in location, form, physical properties or chemical character
14 of a material.

15 92. "Owner or operator" means any person who owns, leases, operates,
16 controls, or supervises an affected facility or a stationary source of
17 which an affected facility is a part.

18 93. "Particulate matter" means any finely divided liquid or solid
19 material, other than sulfur acid mist aerosols or uncombined water, as
20 measured by the test methods and procedures described in R9-3-310.

21 94. "Percent opacity" means the degree to which an effluent plume,
22 or other emission obscures the transmission of light.

23 95. "Person" includes any public or private corporation, company,
24 partnership, firm, association or society of persons, the federal govern-
25 ment and any of its departments or agencies, the state and any of its
26 agencies, departments or political subdivisions, as well as a natural

1 person.

2 96. "Petroleum liquids" means petroleum, condensate, and any
3 finished or intermediate products manufactured in a petroleum refinery
4 but does not mean Number 2 through Number 6 fuel oils as specified in
5 ASTM D-396-69, gas turbine fuel oils Numbers 2-GT through 4-GT as
6 specified in ASTM D-2880-71, or diesel fuel oils Numbers 2-D and 4-D
7 as specified in ASTM D-975-68.

8 97. "Photochemically reactive solvent" means a solvent with an
9 aggregate or more than twenty (20) percent of its total volume composed
10 of the chemical compounds classified below or which exceeds any of the
11 following percentage composition limitations, referred to the total
12 volume of solvent:

13 a. A combination of hydrocarbons, alcohols, aldehydes, esters,
14 ethers, or ketones having an olefinic or cyclo-olefinic type of unsatura-
15 tion: five (5) percent;

16 b. A combination of aromatic compounds with eight or more carbon
17 atoms to the molecule except ethylbenzene: eight (8) percent;

18 c. A combination of ethylbenzene, ketones having branched hydro-
19 carbon structures, trichloroethylene or toluene: twenty(20) percent.

20 Whenever any organic solvent or any constituent of an organic
21 solvent may be classified from its chemical structure into more than
22 one of the above groups or organic compounds, it shall be considered
23 as a member of the most reactive chemical group, that is, that group
24 having the least allowable percent of the total volume of solvents.

25 98. "Plume" means visible effluent.

26 99. "Potential to emit" means the capability to emit a pollutant

1 in the absence of air pollution control equipment unless such equipment
2 is necessary for the source to produce its normal product or is integral
3 to the normal operation of the source. Potential emissions shall be
4 determined at the source's maximum annual rated capacity, unless the
5 source is subject to permit conditions limiting the rate of operation,
6 hours of operation or the type or amount of material combusted or
7 processed.

8 100. "Process" means one or more operations, including equipment
9 and technology, used in the production of goods or services or the
10 control of by-products or waste.

11 101. "Process source" means the last operation or process which
12 produces an air contaminant resulting from (a) the separation of the
13 air contaminants from the process material, or (b) the conversion of
14 constituents of the process materials into air contaminants and which
15 is not an air pollution abatement operation.

16 102. "Process weight" means the total weight of all materials
17 introduced into a process source, including fuels, where these contri-
18 bute to pollution generated by the process.

19 103. "Process weight rate" means a rate established as follows:

20 a. For continuous or long run, steady-state process sources, the
21 total process weight for the entire period of continuous operation or
22 for a typical portion thereof, divided by the number of hours of such
23 period or portion thereof.

24 b. For cyclical or batch process sources, the total process
25 weight for a period which covers a complete operation or an integral
26 number of cycles, divided by the hours of actual process operation during

1 such period.

2 104. "Proportional sampling" means sampling at a rate that produces
3 a constant ratio of sampling rate to stack gas flow rate.

4 105. "Recovery furnace" means the unit used for burning black liquor
5 to recover chemicals consisting primarily of sodium carbonate and sodium
6 sulfide. The recovery furnace includes the direct-contact evaporator for
7 a conventional furnace. "Old design furnaces" are those without welded
8 wall construction or emission-control designed air systems. "New design
9 furnaces" include both welded wall construction and emission-control
10 design air systems. "Cross recovery furnaces" burn combined neutral
11 sulfite waste liquor and black liquor.

12 106. "Reference method" means any method of sampling and analyzing
13 for an air pollutant as described in the Arizona Testing Manual.

14 107. "Reid vapor pressure" is the absolute vapor pressure of
15 volatile crude oil and volatile non-viscous petroleum liquids, except
16 liquified petroleum gases, as determined by ASTM-D-323-59 (reapproved
17 1968).

18 108. "Rotary lime kiln" means a unit with an included rotary drum
19 which is used to produce a lime product from limestone by calcination.

20 109. "Run" means the net period of time during which an emission
21 sample is collected. Unless otherwise specified, a run may be either
22 intermittent or continuous within the limits of good engineering practice.

23 110. "Shutdown" means the cessation of operation of any air pollu-
24 tion control equipment or process equipment for any purpose, except
25 routine phasing out of process equipment.

26 111. "Slag" means the more or less completely fused and vitrified

1 matter separated during the reduction of a metal from its ore.

2 112. "Smelt dissolving tank" means a vessel used for dissolving
3 the smelt collected from the kraft mill recovery furnace.

4 113. "Smelter feed" means all materials utilized in the operation
5 of a copper smelter including metals or concentrates, fuels and chemical
6 reagents and shall be calculated as the aggregate sulfur content of all
7 fuels and other feed materials whose products of combustion and gaseous
8 by-products are emitted to the atmosphere.

9 114. "Smoke" means particulate matter resulting from incomplete
10 combustion.

11 115. "Soot" means the carbonaceous particulate product of incomplete
12 combustion which may be a component of smoke.

13 116. "Source" means any equipment, machine, incinerator, structure,
14 building, device or other article (or combination thereof) which is
15 located on one or more contiguous properties and which is owned or
16 operated by the same person (or by persons under common control) and
17 which emits or may emit an air pollutant. The following are not con-
18 sidered sources for purposes of these regulations:

19 a. Motor vehicles

20 b. Fuel burning equipment which, in the aggregate with such other
21 equipment of the applicant at the same location or property, is rated
22 at less than 500,000 Btu's per hour.

23 c. Agricultural vehicles or agricultural equipment used in normal
24 farm operations.

25 117. "Standard" means a standard of performance promulgated under
26 these Rules and Regulations.

1 118. "Standard conditions" means a temperature of 293K (68°F or 20°C)
2 and a pressure of 101.3 kilopascals (29.92 in. Hg or 1013.25mb).

3 119. "Start-up" means the setting into operation of any air pollution
4 control equipment or process equipment for any purpose except routine
5 phasing in of process equipment.

6 120. "Stationary rotating machinery" means any gas engine, diesel
7 engine, gas turbine, or oil fired turbine operated from a stationary
8 mounting and used for the production of electric power or for the direct
9 drive of other equipment.

10 121. "Stationary source" means any structure, building, facility,
11 equipment, installation or operation (or combination thereof) which is
12 located on one or more contiguous or adjacent properties and which is
13 owned or operated by the same person (or by persons under common control)
14 and which emits or may emit an air pollutant.

15 122. "Sulfuric acid plant" means any facility producing sulfuric
16 acid by the contact process by burning elemental sulfur, alkylation acid,
17 hydrogen sulfide, or acid sludge, but does not include facilities where
18 conversion to sulfuric acid is utilized as a means of preventing emissions
19 of sulfur dioxide or other sulfur compounds to the atmosphere.

20 123. "Supplementary control system" (SCS) means a system by which
21 sulfur dioxide emissions are curtailed during periods when meteorological
22 conditions conducive to ground-level concentrations in excess of ambient,
23 air quality standards for sulfur dioxide either exist or are anticipated.

24 124. "Total reduced sulfur (TRS) means the sum of the sulfur com-
25 pounds, primarily hydrogen sulfide, methyl mercaptan, dimethyl sulfide,
26 and dimethyl disulfide, that are released during the kraft pulping opera-

1 tion and measured by Method 16 in the Arizona Testing Manual.

2 125. "Urban or suburban open area" means an unsubdivided tract of
3 land surrounding a substantial urban development of a residential, indus-
4 trial, or commercial nature and which, though near or within the limits
5 of some city or town, may be used for agriculture, be uncultivated, or
6 lie fallow.

7 126. "Vacant lot" means a subdivided residential or commercial lot
8 which contains no buildings or structures of a temporary or permanent
9 nature.

10 127. "Vapor" means the gaseous form of a substance normally occur-
11 ing in a liquid or solid state.

12 128. "Vapor pressure" means the pressure exerted by the gaseous
13 form of a substance in equilibrium with its liquid or solid form.

14 129. "Visible emissions" means any emissions which are visually
15 detectable without the aid of instruments and which contain particulate
16 matter.

17 130. "Volatile organic compound" means any organic compound that,
18 when released into the atmosphere, can remain long enough to participate
19 in photochemical reactions.

20 131. "Volatility" means the capability of a substance to vaporize
21 or change to the vapor form.

22

23

24

25

26